

US-PAT-NO: 6089765 ..

DOCUMENT-IDENTIFIER: US 6089765 A

TITLE: Print system and printer

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Application Filing Date - AD (1):

19980930

Detailed Description Text - DETX (66):

In the above description, the retransmission request is created in S450 to include data of the user's selected job name desired to be reprinted. However, the transmission request may not contain data of the job name. For example, the LCD 18 on the printer 10 is controlled to display only order numbers indicative of the time order (order of use), in which all the plurality of sets of print data, recorded in the job management table T2, have been printed by the printer 10. More specifically, the LCD 18 merely displays the plurality of order numbers from (-n) through (0), where the smallest order number (-n) indicates the oldest printed data (oldest job) and the greatest order number (0) indicates the latest printed data (last job). Viewing the LCD 18, the user can request a reprint of a job that is defined as have been printed a specific number of jobs earlier than the last job. It is now assumed that the last job printed is assigned with Job ID (n) and that the user operates the key input on the control panel 17 to request a reprint with specifying the order number of "REPRINT=-1". In this case, the CPU 11 may include only this order number information "-1" in the retransmission request and send it to the computer 20. When receiving the retransmission request, the printer monitor 43 on the computer 20 side traces backward one (1) in the management table T1, which is in the form of the circular list, to select print data corresponding to the job with Job ID(n-1) desired to be retransmitted to the printer 10. This method is particularly effective when the printer 10 is connected to the computer 20 that functions as a print server so that print data input to the printer 10 is uniformly managed at the single computer 20. It is also effective when the printer 10 is connected to a local port 1 (LPT1) of a single computer 20 and print data is inputted to the printer 10 only from the single computer 20.

US-PAT-NO: 6151098

DOCUMENT-IDENTIFIER: US 6151098 A

****See image for Certificate of Correction****

TITLE: Reprinting order processing system

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Abstract Text - ABTX (1):

A system for processing a customers order for reprinting uses a plurality of film pieces cut from a film to obtain a predetermined **number of frames and is based on reprint** order information recorded in a recording medium. The reprint order information includes frame position data concerning the position of a target frame to be printed in association with a condition thereof, and is held in a film piece holder in which the plurality of film pieces are held in an end flush state and according to a predetermined arranging order and print **number data concerning the total number of reprints** to be obtained from the target frame. Based on this frame position data, one film piece containing the target frame from the plurality of film pieces is determined and the position of the target frame within the specified film piece is also determined.

Application Filing Date - AD (1):

19990505

Brief Summary Text - BSTX (5):

At a camera shop, when a shop attendant receives a customer's order for reprint, he/she keeps a foldable film piece holder storing a plurality of film pieces and writes in an order slip the serial **number(s) of frame(s) to be reprinted and also the total number of reprints** (copies) to be produced therefrom. Thereafter, an operator of a photographic printer checks the order slip and selects and takes out, from the film piece holder, a film piece(s) which contains the specified frame(s) and then sets the piece to the printer for obtaining reprint(s) of the image of the frame.

Brief Summary Text - BSTX (10):

In view of the above-described state of the art, in the art of specifying a position of a target frame to be printed in a plurality of film pieces as held in a film holder means according to a predetermined order of cutting for obtaining these film pieces from a film to contain predetermined **number of frames, a primary object of the present invention is to provide a reprint** order processing system which can eliminate the necessities of inputting and visual checking of the serial frame number of the frame.

Brief Summary Text - BSTX (11):

For accomplishing the above-noted object, in a system according to the present invention for processing the customer's order for reprinting based on reprint order information recorded in a recording medium with using the film pieces which are cut from a film to obtain predetermined number of frames and which are held in a film holder means, the reprint order information includes frame position data concerning the position of a target frame to be printed in association with a condition thereof held in the film holder means in which the plurality of film pieces are held in an end flush state and according to a predetermined arranging order and print number data concerning the total number of reprints to be obtained from the target frame; and the system specifies one film piece containing the target frame as well as the position of the target frame within the specified film piece based on the frame position data.

Detailed Description Text - DETX (2):

At a camera shop, when a shop attendant receives a reprinting (copying) order from a customer, he/she keeps from the customer a film piece holder 5 storing therein a plurality of film pieces 1, as shown in FIG. 1, when the attendant also keeps a recording sheet 10 shown in FIG. 2 recording therein the frame(s) to be reprinted and the total number of reprints (copies) to be made therefrom. Alternatively, the attendant will have the customer write these data into an order slip. The film piece holder 5 is the well-known type including a plurality (total eight, in the illustrated example) of elongate film pockets 6 each holding therein a film piece. The film pockets 6 are arranged one above another on the unfolded surface of the holder. That is, this holder 5 may be folded along border lines delimiting adjacent pockets. This holder 5 further includes, in the uppermost row, an additional pocket 6a for holding the recording sheet 10. For this purpose, it is preferred that the recording sheet 10 be sized similarly to the film piece 1. The film holder 5 is transparent or semitransparent at least in its surface 5a so as to allow viewing of the frames 2 of the film pieces 1 held therein from the outside. Each pocket 6 has a length adapted for storing one film piece 1 containing total six frames. These film pieces 1 are obtained by cutting a single film into the number of pieces to a length of 6 frames in general. In this cutting, if the last cut piece has only one frame, such short piece may cause a problem in the printing process. Therefore, in order to allow the last film piece to contain at least two frames 2, the length of this last piece is adjusted by e.g. adjusting the length of the second to last film piece so that this piece may contain fewer than 6 frames in total. On the other hand, in the sample illustrated in FIG. 1, the first film piece 1a has the full length corresponding to 6 frames, but contains fewer frames, since the first frame 2 is formed with a predetermined distance from the starting end of the film, due to the mechanical requirement or limitation of the camera employed. As a result, this first film piece contains only four frames in total. The second and third film pieces 1b contains the full number of frames, i.e. total six frames. The second to last film piece 1c has a shorter length and contains only four frames 2 for the above-described purpose of the length adjustment of the last film piece 1e; and accordingly this last film piece 1e contains total three frames 2.

Detailed Description Text - DETX (8):

Next, the reprint order processing procedure using the photographic printer

having the above-described construction will be described. First, the film piece holder 5 holding the recording sheet 10 and the film pieces 1 is fixedly set at a predetermined position on the film piece holder carrier 22. The recording sheet 10 stores the reprint order information including the position of the target frame 2a to be reprinted and the number of reprints to be obtained therefrom. Then, the carrier 22 is moved so as to bring the recording sheet 10 in registry with the film conveying line L for allowing reading of the reprint order information. Namely, the transfer device 30 then draws the recording sheet 10 from the film piece carrier 22 and transfers this sheet 10 to the drive rollers 21, by which the sheet 10 is conveyed along the film conveying line L to the right side in FIG. 4. When the rear end of the recording sheet 10 passes a scanner 80, the drive rollers 21 are reversely rotated to convey the sheet 10 back toward the film piece holder 5 (to the left side in FIG. 4). And, in the course of reverse conveying process, the scanner 80 scans the print number area 13 (in which the data are entered in the mark sheet method) and then transmits to the controller 70 the data concerning the positions of the frames to be printed and the total number of copies obtained therefrom. The film conveying line L formed by the drive rollers 21 disposed in series includes side guides in the form of grooves. Therefore, once the recording sheet 10 enters this film conveying line L, the recording sheet 10 is accurately guided sidewise to be suitable for reliable data reading operation by the scanner.

Claims Text - CLTX (4):

reprint order information recorded in the recording medium, the reprint order information including frame position data concerning the position of a target frame to be printed in the film piece holder means, and print number data concerning the total number of reprints to be obtained from the target frame;

Claims Text - CLTX (10):

3. A system according to claim 2, wherein the print number in the reprint order information is recorded as an attribute value of the matrix element representing the target frame.

US-PAT-NO: **6687684**

DOCUMENT-IDENTIFIER: US 6687684 B1

TITLE: System and method for restrictively authorizing
reprinting of mail pieces having postage indicia

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US Patent No. - PN (1):
6687684

Application Filing Date - AD (1):
19990610

Brief Summary Text - BSTX (10):

A server computer used by the authorizing authority receives the reprint request from a client computer. The request includes information identifying an account for printing postage indicia. The server computer has a reprint authorization procedure that evaluates the request, including verifying that said account is valid. When the account is verified and other criteria are satisfied, a reply is sent to the client computer that includes a reprint authorization. Otherwise, a negative reply is sent to the client computer that does not include the reprint authorization. The criteria applied to the **reprint request may include a limit on the number of reprint** requests to be authorized for the account during a predefined time period, and/or a cumulative monetary limit on reprint requests to be authorized for the account during a predefined time period.

Detailed Description Text - DETX (13):

Evaluation of the request may include, by way of example, comparing the **number, or frequency, or other characteristic of the reprint** requests made by a particular user against one or more threshold values. More generally, any number of predefined evaluation criteria may be applied to each received reprint request. If any of the applicable thresholds are not met, or any of the evaluation criteria are not satisfied, the status of reprint authorization record 422 is changed to denied (492), and a denial is sent back to the user (494). If none of the applicable thresholds are exceeded, the status of the reprint authorization record 422 is changed to authorized (496), and an authorization is sent back to the user (498), which may include a unique authorization code attached thereto (497). The unique authorization code may be used by the USPS for prevention of fraud.

Detailed Description Text - DETX (14):

A skilled artisan will readily recognize the threshold(s) used to determine

whether a reprint request should be authorized may be established according to many methods. For example, a threshold may be a stochastically determined expected value (i.e., expected number of reprint requests) for a particular user, which value may be based on historical data such as mail volume of a user (or a group representative of a user), industry of a user, size of a user and/or other parameters well known to the skilled artisan. The thresholds applied to a reprint request may include, for example, a limit on the number of reprint requests that will be authorized for a particular account during a predefined time period (e.g., a month), and a cumulative monetary limit on the amount of postage in authorized postage indicia reprints during a particular time period. Other criteria applied to each reprint request may include an analysis of the return and destination addresses, including a comparison of those addresses with previous return and destination addresses used on mail pieces by the account.

Detailed Description Text - DETX (15):

The evaluation process may serve to prevent fraudulent behavior. For example, the evaluation process may trigger an audit of a user and/or a report to the postal authority based on the number of and/or frequency of reprint requests as compared to the threshold. The audit or report may be triggered using the same or different threshold(s) as used to provide or deny reprint authorization. Additionally, it is believed that users knowing reprint request histories are recorded and tracked will be dissuaded from fraudulent behavior. Therefore, the current invention provides a system for reducing the incidence of fraud without the need for tracking each postal indicia. Alternatively, the postal authority could scan each mail piece for indicia having reprint authorization and verify that the original indicia was not also used, as discussed above.